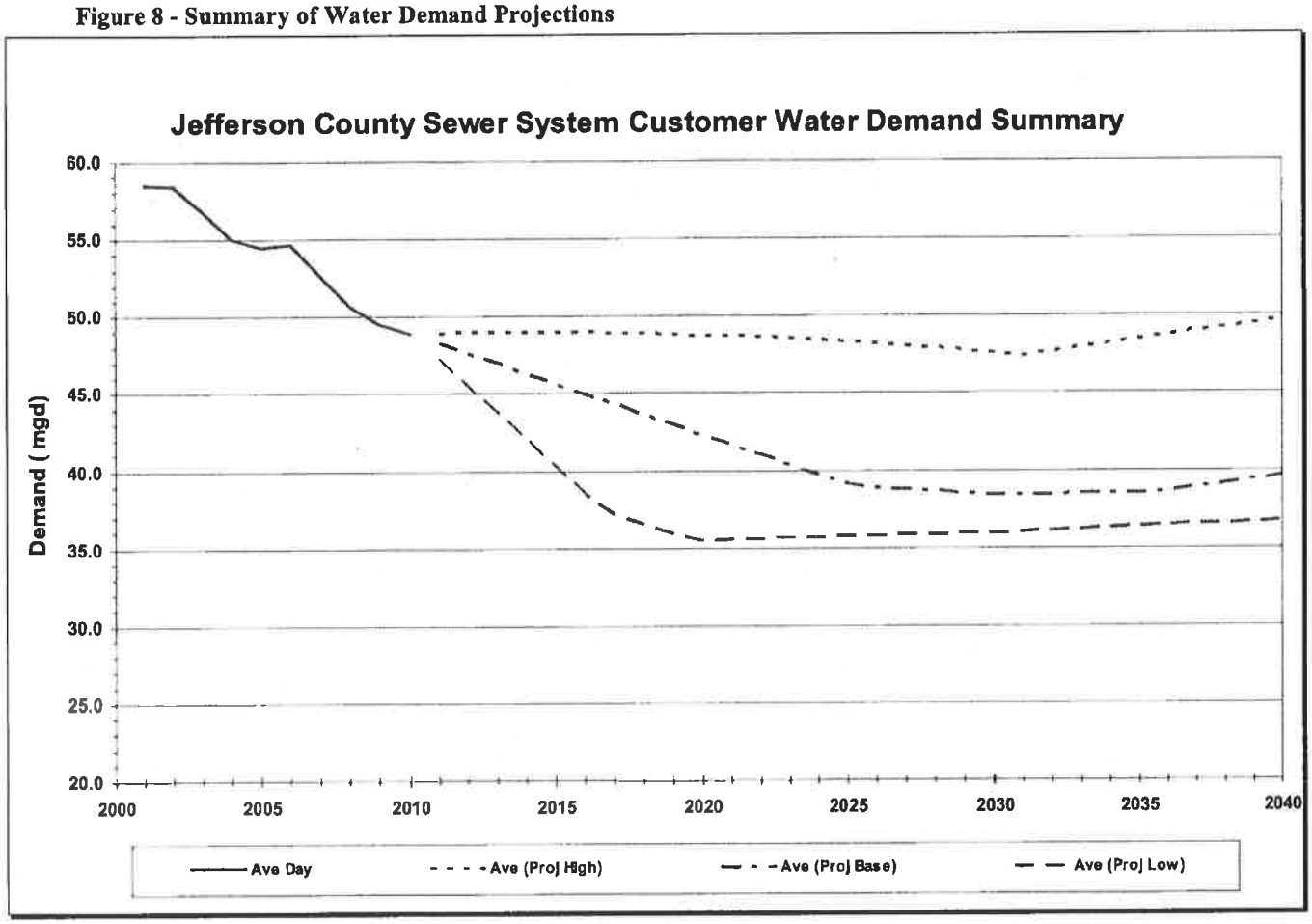
Figure 8 - Summary of Water Demand Projections



In the absence of rate increases, rate structure changes, or new revenue sources, the System will experience a severe decline in annual revenue from what exists today as a result of declines in population and overall water demand. Total revenues generated under existing rates are projected to decrease from approximately $155 million in 2011 to approximately $145 million in 2016. Even if System costs do not increase at all, sewer user charges will need to be increased 6.45% over the next five years just to account for the drop in revenues as a result of decline in customers and usage.[183]

2. Non-Rate System Revenues Will Not Increase.

Non-rate revenues comprise a very small portion of total System revenues, approximately $10.6 million in 2011.[184] Non-rate revenue sources include the annual sewer ad valorem tax, and a small amount of revenue from miscellaneous charges such as impact fees, surcharge fees, and

[183] B&V Cost Allocation Study at Table 2-4. The B&V Cost Allocation Study is discussed in more detail in Section VI *infra*.
[184] B&V Cost Allocation Study at Table 2-5.

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miscellaneous permit fees. Among these non-rate revenue sources, the sewer ad valorem tax generates the most revenue, approximately $5.7 million per year.[185]

The state legislature sets the level of the ad valorem tax. From its establishment in 1901 until 1978, the sewer ad valorem tax was set at 0.5 mills (5 cents on each $100 of the percentage of assessed property value subject to taxation). In 1978, the rate was adjusted to 0.7 mills solely to account for potential losses from Amendment 373 to the state constitution, which set new limits on the percentage of property value subject to taxation.[186] Aside from this adjustment, the ad valorem tax has not been increased since its establishment in 1901.

In 2003, the County's consultant BE&K noted that the County's total ad valorem taxes were 40% lower than the mean total ad valorem taxes of 31 similar municipalities.[187] BE&K recommended that the County seek legislative authority to increase the ad valorem tax by approximately 7 mills, which would generate approximately $44 million in additional annual revenue, with only a marginal increase in total resident tax burden. Even with the 7-mill increase, total resident tax burden in Jefferson County would still remain lower than many other areas.[188] As BE&K noted, increasing the ad valorem tax would result in lower future sewer rate increases and would more equitably spread the burden of paying for the System among all those who benefit from the System, which the Alabama Supreme Court found in *Keene v. Jefferson County,* 33 So. 435 (Ala. 1903), includes all residents of Jefferson County.[189] The County did not pursue BE&K's recommendation.

Absent a change from the state legislature, the sewer ad valorem tax will remain at the current 0.7 mills level, only slightly above the level first authorized in 1901. In addition, the System revenues generated from both the ad valorem tax and the remaining miscellaneous charges are both impacted by customer growth. As explained in the Demand Study, the System is not projected to experience customer growth; instead, the number of System customers is expected to decline. Therefore, the System's total non-rate revenues are not expected to increase significantly above the current level of approximately $10.6 million per year.

C. The System's Future Debt Service Costs Are Unknown.

The amount of the necessary revenue increase is determined by the System's revenue requirement. A utility's revenue requirement is the amount of revenue necessary to meet the utility's costs of providing service. In simplest terms, the revenue requirement is the sum of the following costs: (1) O&M expenses; plus (2) required capital expenditures; plus (3) debt service costs (required principal and interest payments and specified reserves). As discussed in the previous sections, the Receiver has determined the System's projected O&M expenses will decline in the short-term and then level out, and the System's required capital expenditures will increase. The Receiver also has determined that based on the Demand Study and an examination of non-rate revenues, total System revenues will decline without rate increases or other sources of revenue. At this time, however, the System's future total debt costs are uncertain.

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[185] *Id.*
[186] PARCA Report at Appx. D, p.3.
[187] BE&K Report at 13-2.
[188] *Id.* at 13-3.
[189] *Id.* at 13-2.

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To determine the revenue required to refinance the entire approximately $3.158 billion of System debt currently outstanding, the Receiver asked B&V to prepare an analysis of total revenues required to pay all of the System's costs, including the annual debt service costs and coverage requirements for the next five years. The analysis assumes refinancing of the entire $3.158 billion at current market rates, and that sewer revenues would increase uniformly for three years. As shown in the table below, in just the first five years, sewer user charges would have to be increased a total of 220%, with a 50.2% increase in 2012; another 42.7% in 2013; and a third 42.7% in 2014, followed by smaller increases the remaining two years:[190]

Table 5 - Revenue Requirements Assuming Refinancing of $3.158 Billion at Current Fixed Market Rates

Line No.	Description	Projected 2011	2012	2013	2014	2015	2016
1	Beginning Operating Fund Balance	$ 4,197,000	$ 19,630,000	$ 42,616,000	$ 55,763,000	$ 124,002,000	$ 193,806,000
	Revenues:						
	Revenue from Rates:						
2	Revenue under Existing Rates	$ 152,797,000	$ 150,746,000	$ 148,723,000	$ 146,726,000	$ 144,757,000	$ 142,814,000
3	Grease	138,000	138,000	138,000	138,000	138,000	138,000
4	Septage	398,000	398,000	398,000	398,000	398,000	398,000
5	Industrial Surcharge	1,468,000	1,468,000	1,468,000	1,468,000	1,468,000	1,468,000
6	Subtotal	$ 154,801,000	$ 152,750,000	$ 150,727,000	$ 148,730,000	$ 146,761,000	$ 144,818,000
7	Additional Revenue From Rate Increases	-	70,290,000	164,279,000	294,827,000	305,820,000	317,262,000
8	Total Revenue from Rates	$ 154,801,000	$ 223,040,000	$ 315,006,000	$ 443,557,000	$ 452,581,000	$ 462,080,000
9	Other Operating Revenue	4,755,000	4,780,000	4,804,000	4,829,000	4,855,000	4,881,000
10	Non-Operating Revenue	5,812,000	5,928,000	8,618,000	9,151,000	9,964,000	10,796,000
11	Total Revenues	$ 165,368,000	$ 233,748,000	$ 328,428,000	$ 457,537,000	$ 467,400,000	$ 477,757,000
	Revenue Requirements:						
12	O&M Expenses	$ 62,851,000	$ 60,127,000	$ 58,337,000	$ 59,353,000	$ 60,186,000	$ 62,333,000
	Debt Service Requirements						
13	Existing Debt Service						
14	Senior Lien Debt	81,736,000	83,432,000	130,321,000	194,583,000	199,022,000	202,939,000
15	Subordinate Lien Debt	-	55,622,000	86,881,000	129,724,000	132,681,000	135,290,000
16	Total Existing Debt	$ 81,736,000	$ 139,054,000	$ 217,202,000	$ 324,307,000	$ 331,703,000	$ 338,229,000
17	Proposed Future Debt Service	-	-	-	-	-	-
18	Total Debt Service	$ 81,736,000	$ 139,054,000	$ 217,202,000	$ 324,307,000	$ 331,703,000	$ 338,229,000
19	Capitalized Labor	-	(2,981,000)	(3,085,000)	(3,193,000)	(3,305,000)	(3,421,000)
20	Delinquent/Uncollectible Accts	5,348,000	6,631,000	7,825,000	8,831,000	9,012,000	9,202,000
21	Transfer to Construction Fund	-	7,931,000	35,002,000	-	-	-
22	Total Revenue Requirements	$ 149,935,000	$ 210,762,000	$ 315,281,000	$ 389,298,000	$ 397,596,000	$ 406,343,000
23	Annual Operating Balance	$ 15,433,000	$ 22,986,000	$ 13,147,000	$ 68,239,000	$ 69,804,000	$ 71,414,000
24	End of Year Balance	$ 19,630,000	$ 42,616,000	$ 55,763,000	$ 124,002,000	$ 193,806,000	$ 265,220,000
25	Minimum Required Operating Balance	$ 10,332,000	$ 9,884,000	$ 9,590,000	$ 9,757,000	$ 9,894,000	$ 10,247,000
	Debt Service Coverage:						
26	Senior Lien Debt Service Coverage	119%	200%	201%	200%	200%	200%
27	*Minimum Required*	*200%*	*200%*	*200%*	*200%*	*200%*	*200%*
28	Total Debt Service Coverage	119%	120%	121%	120%	120%	120%
29	*Minimum Required*	*120%*	*120%*	*120%*	*120%*	*120%*	*120%*
	Indicated Revenue Increases						
30	Annual	0.0%	50.2%	42.7%	42.7%	0.9%	3.7%
31	Cumulative	0.0%	50.2%	114.3%	205.9%	208.6%	220.0%

The rate increases identified in the table above have the potential to cause significant rate shock to many residential customers, and in the Receiver's judgment, should not be implemented at this time. However, this scenario reveals the serious nature of the current funding deficit and the importance of reaching a negotiated solution to the debt crisis.

[190] B&V Cost Allocation Study at Table 4-1.

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V. The Planned Interim Rate Increase.

As outlined in the previous sections of this report, a review of the System's current financial condition clearly demonstrates the need for an immediate rate increase. System revenues are declining each year due to declining customers and demand, while the System faces substantial operating and capital costs necessary to provide reliable service and maintain regulatory compliance. The System has never been adequately funded dating back to its creation in 1901. This longstanding failure to adequately fund the System ultimately led to entry of the Consent Decree. Following entry of the 1996 Consent Decree, the County ignored multiple warnings and recommendations from its own consultants and repeatedly refused to implement rate increases necessary to pay the massive debt it incurred. Rate increases fell below recommended levels as early as 2003, and there have been no rate increases at all since 2008. Currently, the only option available to the Receiver to increase revenues is through increases to sewer user charges. Regardless of how and at what amount the existing $3.158 billion in outstanding debt is restructured or refinanced, it is clear that revenues must be increased.

The Receiver has determined that an interim rate increase sufficient to increase revenues by 25% is appropriate. This planned rate increase is intended to be a first significant step towards a resolution of the System's overall debt crisis. The County effectively destroyed its reputation in the capital markets when it defaulted on the warrants and exacerbated problems when it suspended the Rate Covenant and decided that it would not raise sewer rates to address the System's debt crisis. If the County is to restore its credibility in the country's capital markets, which is essential for purposes beyond the System (e.g., schools, roads, and any number of other capital needs of the County), it must be seen as taking steps to repay its debt. This rate increase will be a first step in that process.

As noted throughout this report, a negotiated solution to the System's debt crisis is in the best interest of all stakeholders – the County, its citizens, the ratepayers, and the County's creditors – and would give all parties the best possible solution. The County's best possibility of managing future rate increases and having a viable wastewater system is to achieve a negotiated solution – this solution will almost certainly involve significant rate increases, regardless of what the elected officials of the County may feel inclined to tell their constituents. The surest path for the various creditors groups to protect their investment is to strike a deal with the County – that deal will almost certainly involve significant concessions as to the principal amount owed by the County. At the heart of any bargain, which is what the County and its creditors need to reach, are unpopular or unpalatable concessions by both sides to reach a result that benefits both parties and is more favorable than the result both sides would otherwise have been likely to achieve in the absence of the bargain.

In the meantime, the Receiver intends to implement multiple rate increases until System revenues are sufficient. The County, for the better part of a decade, has charged System customers rates that were insufficient to maintain the long term financial health of the System (in much the same manner it has for most of the System's existence), and it has not raised rates at all since 2008.[191] Rates *must* be raised *now,* and must continue to increase in the future until revenues reach the level sufficient to support the System's operations, maintain the System's

[191] Several current County Commissioners have publicly stated that they will not consider any rate increases.

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infrastructure, and satisfy its debt obligations (either its current debt obligations or whatever those debt obligations may turn out to be through some resolution).

The following sections describe the significant factors the Receiver relied upon to reach the determination that a 25% interim rate increase is the appropriate first step.

A. The 25% Revenue Increase is Less than the 32% Increase that Would Have Been Required Under the Lookback Analysis Assuming the County Had Financed All Debt with Fixed Rate Financing.

The County's 2008 default under the Indenture was precipitated principally by the collapse of the refinancing transactions the County entered into in 2002 and 2003. As previously discussed, by 2002, the County had borrowed billons of dollars to finance improvements necessary to comply with the 1996 Consent Decree, and needed still more money to complete the compliance plan. In order to postpone the necessary rate increases as long as possible, the County used an extremely back-loaded financing structure which called for significantly escalating increases in debt service requirements in later years. The County borrowed the first several years of interest payments, and in 2002 and 2003, that additional borrowing began to come due, and the revenues required to meet the current debt service payments increased. Instead of raising rates to the levels required to begin paying down the debt, the County took on even more risk in an attempt to postpone the inevitable rate increases even further. In an ultimately unsuccessful and risky attempt to minimize the rising costs of servicing the substantial amount of debt and keep sewer rates artificially as low as possible, the County refinanced most of its fixed rate debt into auction and variable rate debt in 2002 and 2003. To offset its debt service payments, the County also entered into several interest rate swaps as a hedge against market interest rate exposure.

Much of the media attention surrounding the sewer debt crisis has focused on the 2002 and 2003 refinancing and swap transactions, and the alleged financial fraud and wrongdoing surrounding those transactions.[192] The collapse of these 2002 and 2003 refinancing transactions was the first in a series of events that largely determined the timing of the County's default in 2008. In order to gauge the impact of these 2002-2003 refinancing transactions as compared to the larger overall financial impact of the Consent Decree capital program on rates, the Receiver engaged B&V to provide a "Lookback Analysis." A copy of the B&V report on the Lookback Analysis is included in the Appendix at A-19. The purpose of this Lookback Analysis was to determine the approximate level of revenue from sewer user charges that would be required to meet outstanding debt obligations if the County had not entered into the 2002-2003 auction, variable rate, and swap transactions, but instead had continued to fund the System's capital program with fixed rate bonds like those originally issued between 1997 and 2002.

The B&V Lookback Analysis assumed that fixed rate bond issuances implemented from 1997 through FY 2001 remained in place and were not refinanced with variable rate financing in 2002-2003. The Lookback Analysis also assumed that all additional funds needed for financing of capital projects in 2002 and 2003 were also financed through fixed rate bonds at then-prevailing interest rates. The result of the Lookback Analysis is an indication of the level of rate

[192] The swap agreements have since been terminated.

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increases that would have been required from 2002 to 2010 to fund the capital program using only fixed rate bond issuances, and without any of the 2002-2003 variable rate, auction rate, or swap transactions.

B&V examined the actual revenues produced under the rates in place for each year from 2002 to 2010, and compared that revenue to the actual annual operation and maintenance expenses and debt service costs that would have been incurred by the System for the same period using fixed rate financing. B&V then calculated the additional debt service costs from the hypothetical fixed rate financing the County would need to obtain the additional funds the System borrowed from 2002-2010.

Table 6 - Lookback Analysis: Revenue Requirements Assuming All Fixed Rate Financing

Line No.	Description	2002	2003	2004	2005	2006	2007	2008	2009	2010
		$000	*$000*	*$000*	*$000*	*$000*	*$000*	*$000*	*$000*	*$000*
1	Beginning Operating Fund Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Revenues:									
	Revenue from Rates:									
2	Revenue under Existing Rates	$ 76,956	$ 76,956	$ 76,956	$ 76,956	$ 76,956	$ 76,956	$ 76,956	$ 76,956	$ 76,956
3	Additional Rev. From Rate Incr.	84,082	89,961	89,961	97,068	136,460	136,460	136,460	136,460	136,460
4	Total Revenue from Rates	$ 161,038	$ 166,917	$166,917	$174,024	$213,416	$213,416	$213,416	$213,416	$213,416
5	Other Revenue	11,846	16,265	15,965	19,044	17,118	17,713	19,994	19,528	19,248
6	Total Revenues	**$ 172,884**	**$ 183,182**	**$182,882**	**$193,068**	**$230,534**	**$231,129**	**$233,410**	**$232,944**	**$232,664**
	Revenue Requirements:									
7	O&M Expenses	$ 40,555	$ 42,104	$ 43,185	$ 44,792	$ 49,990	$ 45,333	$ 51,984	$ 54,758	$ 51,362
	Debt Service Requirements									
8	Existing Debt Service	104,216	108,364	97,198	102,924	100,481	97,488	97,485	97,486	97,484
9	Proposed Future Debt Service	-	-	-	37,043	80,063	80,063	80,063	80,063	80,063
10	Total Debt Service	$ 104,216	$ 108,364	$ 97,198	$139,967	$180,544	$177,551	$177,548	$177,549	$177,547
11	Transfer to (from) Rate Stab. Fund	28,113	32,714	32,714	8,309	-	-	-	-	-
12	Transfer to Depreciation Fund	-	-	9,785	-	-	8,245	3,878	637	3,755
13	Cash Funded Capital Outlay	-	-	-	-	-	-	-	-	-
14	Total Revenue Requirements	**$ 172,884**	**$ 183,182**	**$182,882**	**$193,068**	**$230,534**	**$231,129**	**$233,410**	**$232,944**	**$232,664**
15	Annual Operating Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	End of Year Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Calculated Required Revenue Increase:									
17	Annual	109.3%	3.7%	0.0%	4.3%	22.6%	0.0%	0.0%	0.0%	0.0%
18	Cumulative [a]	109.3%	116.9%	116.9%	126.1%	177.3%	177.3%	177.3%	177.3%	177.3%
	Actual Implemented Revenue Increase:									
19	Annual	17.3%	38.8%	10.0%	10.0%	7.1%	8.2%	7.7%	0.0%	0.0%
20	Cumulative [a]	17.3%	62.8%	79.1%	97.0%	111.0%	128.3%	145.9%	145.9%	145.9%

(a) Reflects the cumulative effect of previous revenue increases, as compared to revenues in FY 2001.

The Lookback Analysis reveals that the current System funding deficit was not solely or even primarily caused by the 2002-2003 refinancing transactions. The County's expenditures to comply with the Consent Decree have resulted in one of the highest, if not the highest, investment rate per customer for a major wastewater system anywhere in the country. The

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Lookback Analysis also demonstrates that the funding deficit is the result of the County's long-standing failure to raise rates to levels sufficient to meet the System's obligations. This reinforces the need for an immediate increase in System revenues to begin the process of bringing revenues up to required levels.

The B&V Lookback Analysis calculated the level of rate increases that would have been required if the County had not refinanced its fixed rate debt in 2002-2003 with variable rate and auction rate debt, and had instead used all fixed rate financing to pay for the improvement program the County implemented to comply with the Consent Decree. This Lookback Analysis thus provides the level of rate increases that would have been required through 2010 without the 2002-2003 variable rate transactions. The Lookback Analysis shows that even without the 2002-2003 refinancing transactions, revenues today would need to be 31.5% higher in order to meet the minimum level required to comply with the County's contractual obligation to raise rates to levels necessary to fund the fixed rate debt it incurred. By not raising rates to at least 2010 levels necessary to support fixed rate financing, the County fell further behind by approximately $325 million in funding the System's requirements, and the customers avoided paying $325 in additional sewer user fees.

The Lookback Analysis only examines a fixed period of time from 2003 to 2010. Both the County's actual variable rate financing plans and the hypothetical fixed rate financing scenario used in the Lookback Analysis were based on a back-loaded structure that called for escalating future increases in total debt costs. Therefore, following the 31.5% increase necessary to bring revenues up to 2010 required levels, significant future rate increases would also be necessary under both scenarios.

Although not the sole criteria, the fact that the Receiver's planned first revenue increase of 25% is less than what would be required to bring the rates up to minimum 2010 levels in the Lookback Analysis provides additional support that the 25% revenue increase is a reasonable and appropriate first step.

B. System User Charges Have Not Been Increased Since January 2008 and the 25% Revenue Increase is an Appropriate Make-Up for Not Having Increased Rates Over the Past Few Years.

Sewer user charges have not been increased at all since January 2008, over three years ago. A gauge of the level of rate increases experienced by other public wastewater systems over this same time period can be found in the 2010 Service Charge Index prepared by the National Association of Clean Water Agencies ("NACWA"). NACWA is an industry group comprised of over 300 of the largest public wastewater systems in the country. Each year since 1985, NACWA has collected financial and rate information from its members and published the results in a Service Charge Index that calculates average rate increases for each year. A copy of the 2010 NACWA Service Charge Index is included in the Appendix at A-20.

The 2010 NACWA Service Charge Index indicates that over the past five years, sewer rates have risen on average 6% per year. If System rates had increased at that same rate in January of 2009, 2010, and 2011, respectively, the total cumulative rate increase for those three years would be 19.1%. Based on this industry-wide average, the Receiver's recommended first

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revenue increase of 25% is within the range of the increase needed to make up for the failure to raise rates in 2009, 2010, and 2011, even before consideration of the extreme capital requirements and O&M needs of the System compared to other wastewater utilities.

C. The 25% Revenue Increase Will Not Cause Significant Rate Shock as Compared with Rate Increases Imposed by Other Utilities within the Last Few Years.

Based on 2010 billing data, the average residential customer of the System with the standard 5/8-inch meter uses approximately 6 Ccf of water per month. Based on that water usage, the same customer would receive an average monthly sewer bill of $37.74 per month under existing rates.[193] With the Receiver's planned 25% revenue increase, this customer's average monthly bill will increase to $46.88, which is an increase of $9.14, or 24.2%.[194] This level of increase should not cause significant rate shock because it is within the range of the prior System rate increases in 2001 (21.4%) and 2003 (38.8%).

A rate increase that impacts the average residential bill by $9.14 or 24.2%, as the planned 25% revenue increase does, is also within the range of rate increases imposed by other utilities over the past few years.[195]

The chart below demonstrates that the 24.2% impact of the Receiver's planned rate increase is within the range of percentage increases imposed in recent years by other utility providers in Alabama and the Atlanta Watershed Management Authority, the wastewater provider for the Atlanta area that is also operating under a Consent Decree.

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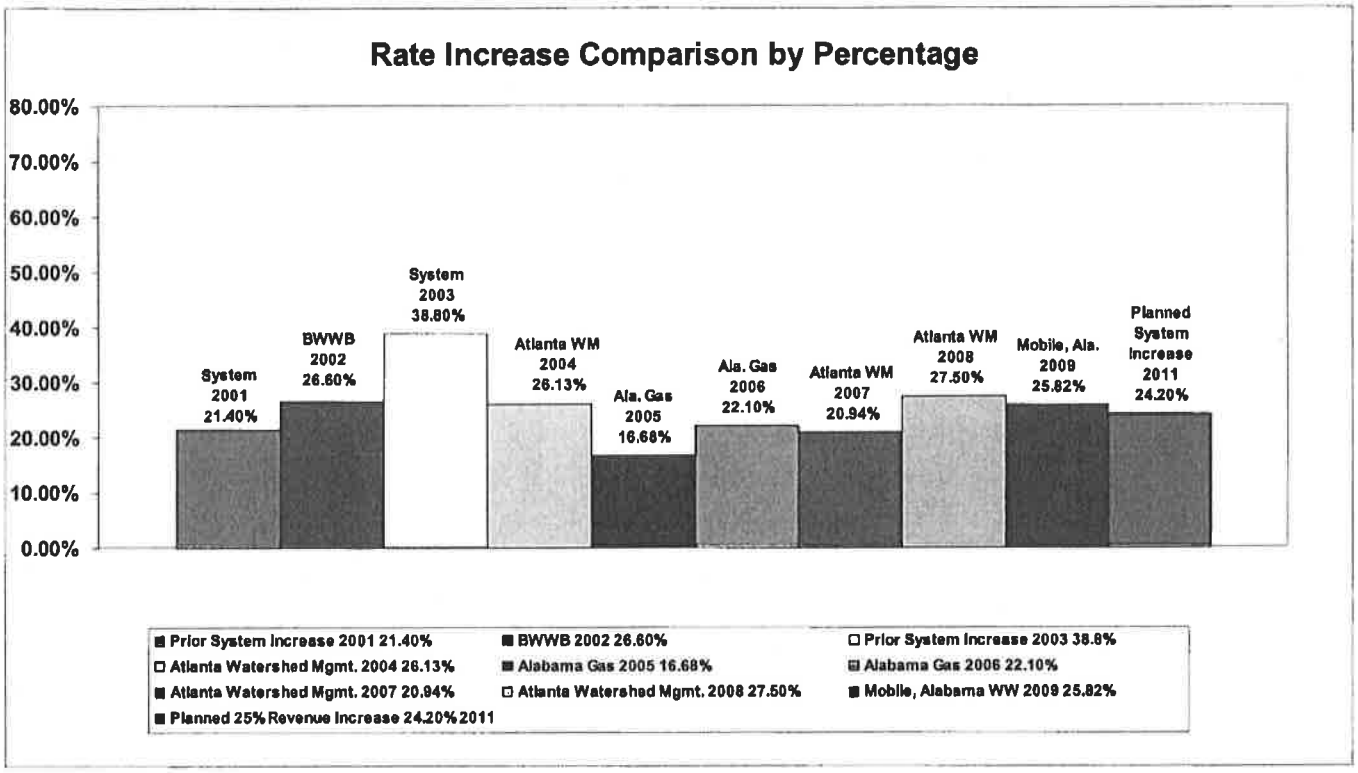
[193] B&V Cost Allocation Study at 21. The $37.74 is calculated by multiplying the current $7.40 Ccf rate for 5/8 meters by 85% of the total 6 Ccf usage (5.1 Ccf). Variances in meter size, usage, and rounding by water providers may produce different results for particular customers.

[194] *Id.*

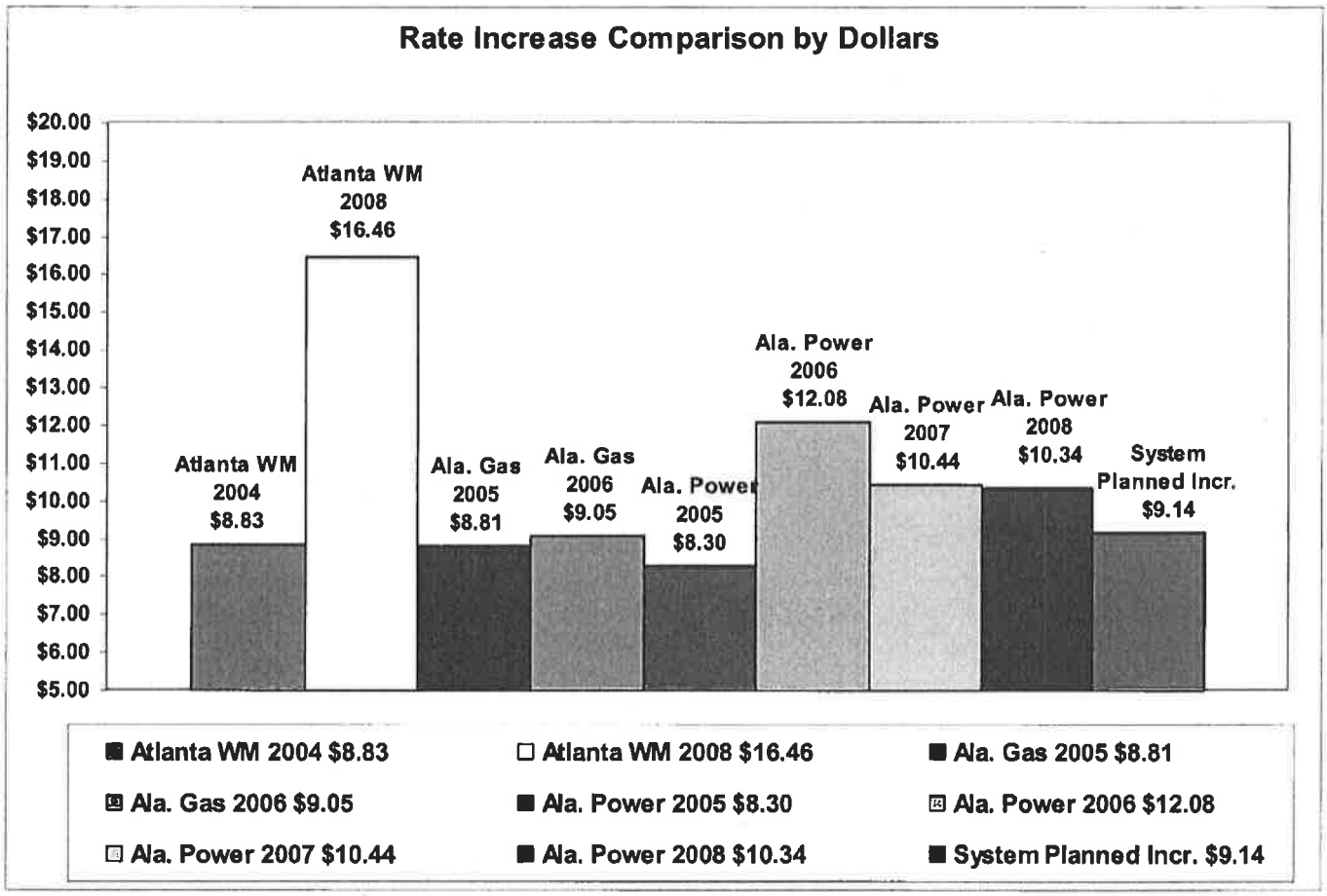
[195] This information was gathered through contacts with the various utilities named and through publicly-available information.

Figure 9 - Rate Increase Comparison by Percentage



The $9.14 impact of the Receiver's planned rate increase is also within the range of dollar increases implemented in recent years by other Alabama utilities and by Atlanta Watershed Management, as shown in the chart below:

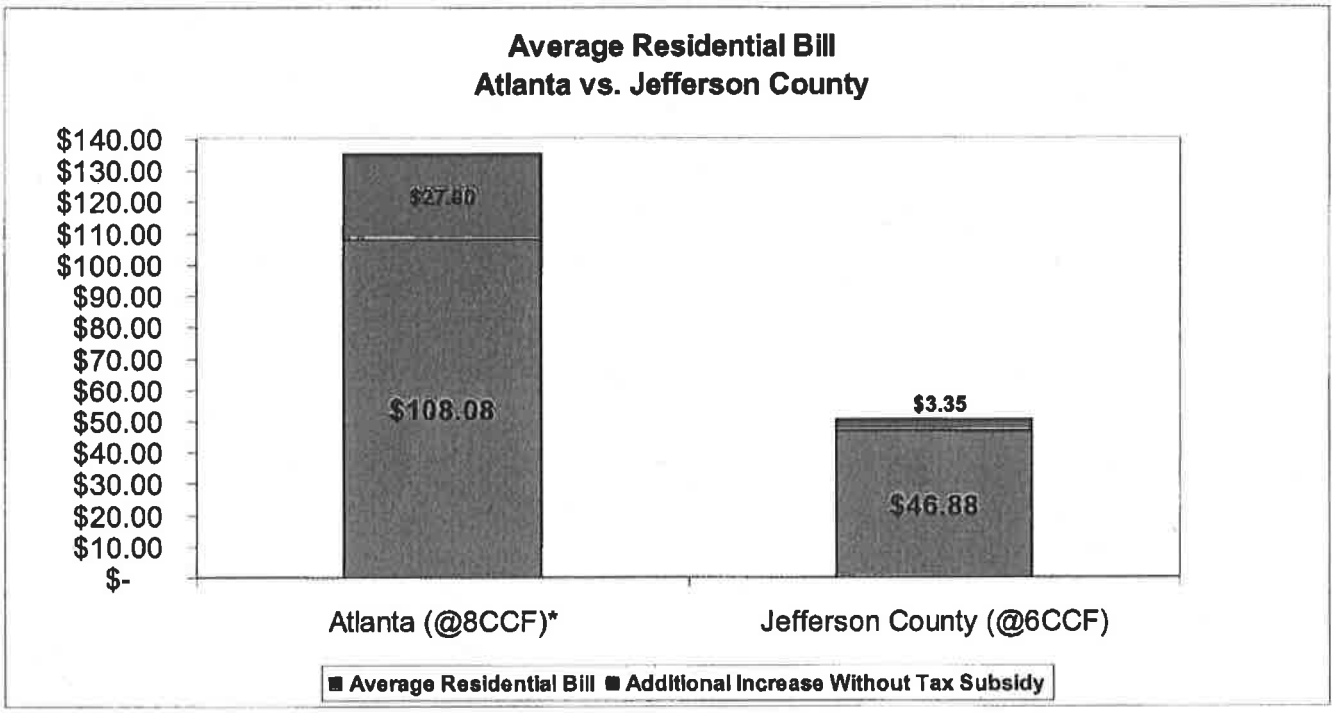
Figure 10 - Rate Increase Comparison by Dollars



This information regarding other utilities' rate increases in recent years confirms that the impact of the planned 25% revenue increase on the average residential bill is not so large as to cause significant rate shock. This rate increase will obviously have an impact on System ratepayers but is ultimately necessary to begin the process of addressing the System's debt problems and capital needs.

While direct comparisons between different utility rates are problematic due to the number of different factors that must be considered to reach an apples to apples comparison, including operating costs, capital requirements, and other socio-economic factors, the Receiver has conducted a comparison between System rates and the wastewater rates charged by the Atlanta Department of Watershed Management. Both Atlanta and the System are wastewater systems serving major cities in the southeast, and both systems are currently under EPA consent decrees. Both systems are also subsidized by additional sources of tax revenue in addition to revenue from user fees. As shown in the graph below, the average residential bill in Atlanta is substantially higher than the average residential bill for the System following the Receiver's 25% revenue increase, and the discrepancy becomes even greater once you consider the subsidies in each System.

Figure 11 - Comparison of Average Residential Bill in Atlanta and Jefferson County



D. The 25% Revenue Increase Meets the Legal Requirement of Reasonableness and is Within the Range of Acceptable Financial Impact Analysis.

1. The Interim Rate Increase is Reasonable Under Alabama Law.

Any increase in rates must comply with legal standards of reasonableness. Amendment 73 to the Alabama Constitution requires that the rules and regulations fixing rates and charges of the sewer System must be reasonable and non-discriminatory. Alabama case law is primarily concerned with uniformity and the absence of discrimination between rate classes. Cost of service is a very important factor, and most reported rate challenges have involved instances where the rate was actually generating a surplus for the utility. *See, e.g.*, *Marshall Durbin & Co. of Jasper, Inc. v. Jasper Util. Bd. of City of Jasper*, 437 So. 2d 1014 (Ala. 1983), overruled on other grounds, *Ex parte Water Jet Sys., Inc.*, 758 So. 2d 505 (Ala. 1999). Rates high enough to generate a surplus are not *per se* unreasonable or confiscatory. *See, e.g.*, *Campbell v. Water Works & Sanitary Sewer Bd. of City of Montgomery*, 115 So. 2d 519 (Ala. 1959).

The Receiver Order confirmed that the sewer debt, and its corresponding service requirement, is an obligation of the System. It is undisputed that the System is not currently generating a surplus. The interim rate increase the Receiver intends to implement will not generate revenues high enough to earn a surplus (or even satisfy all of the System's current

operational and debt service needs), as the numerous studies discussed in this report, including the B&V reports, establish.

No reported Alabama cases have directly addressed the concept of financial impact in considering the reasonableness of utility rates. Nevertheless, the impact of the rate increase on consumers has been considered by the Receiver. The initial rate increase is designed to be substantial enough to allow the System to make significant progress towards eliminating the substantial funding deficit, but not so large as to cause rate shock or further destabilize the System revenues. The Receiver intends to monitor the impact of this first interim rate increase on System revenues, both positive and negative, and take that impact into consideration in determining the level of future rate increases.

2. *According to the EPA Financial Impact Guidelines, the Rate Increase Will Not Have a High Financial Impact on Residential Customers.*

Although not a test of reasonableness or required by Alabama law, the EPA has addressed the issue of financial impact standards in a narrow context. With regard to sewer rates, the EPA developed guidelines to assess financial capability for consideration in Combined Sewer Overflow ("CSO")[196] consent decrees designed to settle litigation brought against wastewater providers for violations of the CWA (the "Financial Capability Guidelines").[197] The Financial Capability Guidelines were designed in part to "allow a phased approach to implementation of CSO controls considering a county's financial capability."[198] The Financial Capability Guidelines assign a value (the "Residential Indicator") to the ratio of the expected average sewer bill to median household income; a Residential Indicator that is greater than two percent of median household income ("MHI") is considered to have "high" financial impact on a residential ratepayer.[199]

The Financial Capability Guidelines were designed to serve as a *forward-looking* tool used to estimate and evaluate the financial resources a wastewater provider is expected to have available in order to implement CSO controls and to assist in the development of CSO control implementation schedules. For example, a high residential indicator might be used by a wastewater operator in violation of the CWA to persuade the EPA to allow for more time to completely fix the overflow problem. However, even if a planned program results in a high burden under the Financial Capability Guidelines, the utility can still be required to implement the program based on the totality of the circumstances. Financial Capability Guidelines were not designed to assess the financial impact of costs a wastewater provider has *already* incurred.

Even so, the Receiver's planned interim rate increase will not have a "high" financial impact on residential ratepayers according to the Financial Capability Guidelines. The Receiver

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[196] A CSO is a sewer overflow that occurs in a combined system that collects both storm water and wastewater.

[197] EPA, *Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development,* February 1997, EPA-832-B-97-004, available at http://www.epa.gov/npdes/pubs/csofc.pdf (last visited June 6, 2011).

[198] *Id.*

[199] Similarly, a Residential Indicator of 1.0% to 2.0% is considered to have a "mid-range" financial impact under the Financial Capability Guidelines, and a Residential Indicator less than 1.0% is considered to have a low impact.

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retained Industrial Economics, Incorporated ("IEI") to evaluate the potential economic impact of the interim rate increase described herein under the Financial Capability Guidelines. IEI is a private consulting firm that provides economic and regulatory analysis. The Receiver retained IEI because EPA has frequently used IEI to provide financial impact analysis in consent decree proceedings. IEI's report "Financial Impact of Proposed Rate Increase on Residential Customers of Jefferson County Environmental Services Department," is included in the Appendix at A-21.

IEI performed a detailed demographic analysis of the System's service area, analyzing the number of households served, a breakdown of households by structure type, and median household income within the System service area, weighted by the households in each jurisdiction served.

After finding that the estimated median household income in the System service area is $46,593, IEI concluded that the current Residential Indicator in the System service area is "low," based off of an estimated average annual sewer cost per household of $426.[200] To determine the impact of the Receiver's planned interim rate increase, IEI performed three separate analyses: (1) short run; and (2) long run; and (3) cost of service allocation.

The short run analysis is based on the fact that in the coming five years, ESD projects that its capital program will be funded through reserve funds currently on hand, and not through operating funds or additional borrowing. The long run analysis assumes that once those reserve funds are depleted, ESD will fund its capital program through ongoing revenues, which will leave less money to cover debt service costs.[201] The results of the short run and long run analyses were identical: under either scenario, the Residential Indicator will be 1.1%, in the low end of the "mid" impact range, based on an estimated average annual sewer cost per household of $534.[202] The impact is identical under either scenario because, although the amount of funds available to pay debt service costs is different depending on whether the capital program is funded through reserves or operating revenues, the total funds available to cover non-debt costs of operating and maintaining the system are the same. Both the short run and long run analyses calculate the financial impact of the rate increase based on the current 55% of total System costs that are allocated to and paid by the residential customers.

The third analysis IEI performed gauged the impact of the rate increase assuming a cost of service allocation was in place. Cost of service occurs when each rate class is allocated the full percentage of costs that the System incurs to serve that particular rate class. If the residential class within the System were allocated its cost of service, the allocation would increase from the current 55% to 66%. The results of this hypothetical cost of service analysis would eventually increase the average annual sewer cost per household to $641, which results in a Residential Indicator of 1.37%, which still is in the "mid" range according to the Financial Capability Guidelines.[203]

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[200] IEI Report at Exh. 7.
[201] As discussed in Section III.B *supra*, the Indenture prohibits the use of System revenues for capital expenditures unless all debt costs are paid in full.
[202] IEI Report at Exh. 8.
[203] IEI Report at Exh. 9.

IEI also noted that, even with the interim rate increase, the System still has an average wastewater bill that is significantly less than the average bill in Atlanta and that several communities, like Jefferson County, are likely to face double-digit rate increases as they update their infrastructure and comply with Consent Decrees. The results of the IEI analysis – that the Receiver's planned interim rate increase falls within the "mid" impact range under the EPA Financial Capability Guidelines under current allocations, and would remain in the "mid" impact range assuming a cost of service allocation, provide additional support that the Receiver's planned 25% revenue increase is an appropriate first step in bringing System revenues to sufficient levels.

E. Based on the Citi Models, the 25% Revenue Increase is Compatible With a Variety of Possible Solutions.

The models Citi prepared at the Receiver's request for negotiation purposes provide an additional indicator that the Receiver's 25% revenue increase is appropriate.[204]

Citi took the O&M and capital improvement plans and the projected System revenues provided by the Receiver and calculated the total revenue increases that would be required to meet debt levels ranging from approximately $1.4 billion to the full outstanding balance of approximately $3.158 billion, assuming those amounts were refinanced at estimated future market conditions. This range was intended to represent the range of possible debt levels that the independent public corporation would need to refinance following negotiated concessions by the various creditors groups.

The results of the Citi models indicate that for any negotiated solution with a debt level between approximately $1.4 billion and approximately $2.5 billion (Scenarios 2 through 8), the required first year revenue increase would be within the range of a 20% to 28% total increase in revenues.

[204] The Citi models are discussed in more detail in Section III.C *supra*.

Table 7 - Citi Scenario Results

Scenario	Revenue Increases[205]			Par Value of New Debt[206]	Available Net Proceeds[207]	Redemption Cost[208]	Funding Gap[209]
	2012	2013	2014				
1	3.0%	3.0%	3.0%	1,578,420	1,370,160	3,158,299	(1,788,138)
2	20.0%	3.0%	3.0%	1,600,144	1,406,132	3,158,299	(1,752,166)
3	20.0%	3.0%	3.0%	1,800,301	1,575,536	3,158,299	(1,582,763)
4	20.0%	3.6%	3.6%	2,001,836	1,747,501	3,158,299	(1,410,797)
5	20.0%	10.0%	10.0%	2,200,441	1,940,201	3,158,299	(1,218,098)
6	20.0%	18.7%	18.7%	2,401,043	2,137,513	3,158,299	(1,020,785)
7	23.7%	23.7%	23.7%	2,602,891	2,328,859	3,158,299	(829,440)
8	28.0%	28.0%	28.0%	2,801,430	2,514,686	3,158,299	(643,613)
9	32.2%	32.3%	32.3%	3,001,714	2,700,240	3,158,299	(458,058)
10	36.0%	36.3%	36.3%	3,201,036	2,884,126	3,158,299	(274,172)
11	42.1%	42.1%	42.1%	3,499,031	3,158,326	3,158,299	28

This demonstrates that the Receiver's planned 25% revenue increase is compatible with a wide range of potential negotiated debt levels, and provides additional support that the planned interim increase is appropriate.

VI. Description of the New Rates: The B&V Sewer Cost Allocation and Rate Study.

The 25% revenue increase will be implemented through a new rate design. The Receiver retained B&V to perform a sewer cost allocation and rate study (the "B&V Cost Allocation

[205] All scenarios assume 3.0% rate increases annually from 2015 onwards for the full term of any newly-issued bonds.
[206] All dollar figures in 1,000s. The Par Value of New Debt represents the amount of new debt that will yield the Available Net Proceeds.
[207] The difference between the Par Value of New Debt and the Available Net Proceeds represent total issuance costs for each scenario.
[208] Redemption Cost is the total amount of debt currently outstanding.
[209] The Funding Gap is the difference between the amount of debt currently outstanding and the Available Net Proceeds resulting from the refinancing under each scenario. The Funding Gap represents the total amount of creditor concessions for each scenario, assuming that the County pays the issuance costs.

Study"). A copy of the report summarizing the results of the B&V Cost Allocation Study is included in the Appendix at A-22.

The B&V Cost Allocation Study first compares the System's total cost of providing service with the projected revenue generated under existing rates, and confirms the analysis previously discussed demonstrating that, due to declining customer accounts and usage, the total System revenues will decline over the next four years by approximately 6.45%, from approximately $155 million in 2011 to approximately $145 million by 2016, while the System's total revenue requirement is projected to increase from approximately $211 million in 2012 to approximately $406 million by 2016.[210] In order to meet the current System revenue requirements, at the current outstanding debt level of approximately $3.158 billion, assuming the debt could be refinanced, revenues would need to be increased by approximately 50% in 2012, 43% in 2013, and 43% in 2014 in the first three years alone. This confirms the overwhelming evidence that current System revenues are insufficient to meet the System's obligations.

The B&V Cost Allocation Study also performed a cost of service analysis and recommended a new rate design to implement the Receiver's planned 25% interim revenue increase. The B&V Cost Allocation Study confirmed that the System's rates need a design that better captures the costs of servicing the different classes of System customers and provides the System with a more predictable revenue stream. The design changes described below are a significant step in the right direction.

A. Existing Rate Structure.

The System currently charges customers a small fixed monthly fee or a varying charge calculated from the customer's monthly volumetric water usage. The fixed charge is a minimum charge only applied to customers with no billable volume or such a low volume that their bill would be less than the minimum charge. Billed sewer volume for residential customers is calculated using 85% of their metered water usage; non-residential customers are billed using 100% of their metered water usage. The current rates charged by the System are listed below:

Table 8 - Existing Monthly Minimum Charges

Water Meter Size	Existing Charge
5/8"	$2.00
3/4"	$2.50
1"	$5.00
1.5"	$9.00
2"	$14.00
3"	$28.00
4"	$45.00
6"	$85.00
8"	$200.00
10"	$250.00

[210] B&V Cost Allocation Study at Table 2-4 and 4-1.

Table 9 - Existing Volumetric Charges ($/Ccf)

Residential	$7.40
Non-residential	$7.40

Table 10 - Existing Miscellaneous Charges ($/1,000 gal.)

Grease Charges	$30.00
Septage Charges	$30.00

Table 11 - Existing Extra Strength Charges

	Tier 1		Tier 2	
Component	**$/lb**	**mg/l**	**$/lb**	**mg/l**
Total Suspended Solids	$0.1950	300-1000	$0.2925	1001+
Biochemical Oxygen Demand	$0.1500	300-1200	$0.3000	1201+
Chemical Oxygen Demand	$0.1950	750-3000	$0.2925	3001+
Fats, Oils & Grease	$0.1000			
Total Phosphorus	$2.000			

The System needs a more reliable monthly revenue stream to mitigate the unpredictable variances resulting from changes in water usage patterns. The easiest way to do this is to institute a fixed monthly service charge that System customers pay each month. This is consistent with the practices similar utilities employ (as an example, BWWB charges its customers with the standard 5/8 inch meter a $15.21 monthly fee).

The System's annual revenue requirements are its costs of service. The total cost of service is broken down into functional cost components, then allocated to cost categories, and then distributed amongst the various customer classes.

If the System's rate structure were immediately converted to a cost of service system, the following rate increases and adjustments would result:[211]

Table 12 – Immediate Conversion to Cost of Service

Customer Class	Indicated Revenue Increase Required	Indicated Revenue Adjustment
Residential	$47,512,000	79.11%
Non-Residential	($13,087,000)	-14.43%
Grease	$188,000	136.23%
Septage	$678,000	170.35%
Surcharge	2,895,000	197.21%
Total	$38,186,000	25.00%

Cost of service allocations to customer classes should not be construed as literal or exact requirements in rate design, but instead as a guide to utilize in making rate adjustment decisions. Industry practice and practical considerations sometimes modify rate adjustments by taking into account additional factors such as the extent of change from previous rate levels and past or present policies, practices and considerations.

B. New Rate Structure.

In this case, it is not practical to immediately transition to a cost of service rate structure due to the likelihood that an immediate transition would cause significant rate shock. The rates below promote the goal of rate stabilization.

Monthly Service Charge. The Receiver intends to implement a new monthly service charge that will be paid by all System Customers, regardless of the amount of their monthly water usage. This charge will be assessed as follows[212]:

Table 13 - New Monthly Service Charge

Water Meter Size	Monthly Service Charge ($/month)
5/8"	$15.00
3/4"	$22.00
1"	$31.00
1.5"	$57.00
2"	$85.00
3"	$215.00
4"	$349.00
6"	$680.00
8"	$1,013.00
10"	$1,350.00

[211] B&V Cost Allocation Study Table 5-6.
[212] B&V Cost Allocation Study Table 6-1.

Volumetric Charges. The Receiver intends to adjust the System's volumetric rates as follows:

Table 14 - New Volumetric Charges

Class	Rate
Residential	$6.25/Ccf
Non-residential	$8.40/Ccf
Grease	$79.00/1000 gal
Septage	$79.00/1000 gal.

Surcharge Rates. The Receiver intends to adjust the System's current surcharges as follows:[213]

Table 15 - New Surcharge Rates

Component	$/lb
Total Suspended Solids	0.2734
Biochemical Oxygen Demand	0.8284
Chemical Oxygen Demand	0.4142
Fats, Oils & Grease	0.1715
Phosphorus	3.2650

Recovery of Cost of Service under New Rates.[214] The adjusted rates are intended to increase total System revenues by 25%. With the changes to the rate structure, this revenue increase is projected to be allocated as follows:

Table 16 - Cost of Service Allocation Under New Rates

Customer Class	Total Cost of Service	Revenue Under Existing Rates	% of Revenue (Existing Rates)	Revenue Under Proposed Rates	Cost of Service Recovery Under Proposed Rates	Increase Over Existing Rates
Residential	$107,568,000	$60,056,000	39.32%	$75,292,000	69.99%	25.37%
Non-Residential	$77,604,000	$90,691,000	59.37%	$110,385,000	142.24%	21.72%
Grease	$326,000	$138,000	.09%	$364,000	111.66%	163.77%
Septage	$1,076,000	$398,000	.26%	$1,048,000	97.40%	163.32%
Surcharge	$4,363,000	$1,468,000	.96%	$4,364,000	100.02%	197.28%
Total	**$191,594,000**	**$152,751,000**	**100**	**$191,453,000**	**100.27%.**	**25.34%**

[213] B&V Cost Allocation Study at 20.
[214] B&V Allocation Study at 21, Table 6-2.

C. Implementation of Interim Rate Increase.

The Receiver intends, subject to public comment, to implement the rate increases and rate design changes described herein as soon as possible. The Receiver will hold a public hearing on these matters on June 29, 2011, at 2:30 p.m. at the Jefferson County, Alabama, Courthouse. At that hearing, copies of this report will also be available, in addition to being available on the internet at www.jeffcowastewaterfacts.com. Subject to comments received from the public at the public hearing, the Receiver will take the steps necessary to implement the rates described herein.

VII. Implementation of a Low-Income Assistance Program.

The Receiver is beginning the process of implementing a program designed to assist customers with low annual incomes who will be especially challenged by the rate increases that will be implemented in the coming years. If fully implemented, this program should eliminate the impact of the interim rate increase on those System ratepayers with the lowest incomes.

Many, if not most, utility providers have similar programs designed to assist customers. Such programs serve to stabilize utility revenues by decreasing expenses from delinquent and uncollectible accounts and by allowing for rate increases necessary to meet the utility's revenue requirement.

The Receiver engaged Dollar Energy to create and assist with implementation of a low-income program. Dollar Energy is a non-profit organization that, among other activities, assists utilities in the design and administration of a variety of low-income programs, utility consumer education, and customized software technology. A copy of Dollar Energy's report describing the planned low income program is included in the Appendix at A-23.

A. Program Eligibility.

Program eligibility criteria will be based on the Federal Poverty Income Guidelines ("FPIG"). The FPIG take into account the numbers of household members in relation to the total monthly or annual income.[215]

The guideline proposed by Dollar Energy matches that used by the federally funded Low Income Heating and Energy Assistance Program ("LIHEAP"). Program Guidelines for LIHEAP are typically between 150% to 200% of the FPIG. The initial maximum income level for the Receiver's planned program will restrict eligibility to households with annualized incomes of 150% of the poverty level or less.

Once the plan becomes operational, customers will be able to apply by calling a toll free number dedicated to the customers in Jefferson County and administered by Dollar Energy. The telephone application process typically lasts approximately 10 minutes, and upon receipt of required program documentation, the enrollment can be completed in less than 24 hours. Once enrolled, a customer can begin receiving the credit on their next billing statement.

[215] The FPIG are available online at http://aspe.hhs.gov/poverty.